STATE OF INDIANA) BEFORE THE INDIANA OFFICE
COUNTY OF MARION) OF ENVIRONMENTAL) ADJUDICATION
COUNTION) ADJUDICATION)
)
IN THE MATTER OF:	,)
)
OBJECTIONS TO THE ISSUANCE OF)
PSD/NEW SOURCE CONSTRUCTION)
AND PART 70 OPERATING PERMIT)
NO. T147-39554-00065,)
)
SOUTHWESTERN INDIANA CITIZENS FOR)
QUALITY OF LIFE, INC. AND)
VALLEY WATCH, INC.	,)
,)
Petitioners)
)
INDIANA DEPARTMENT OF)
ENVIRONMENTAL MANAGEMENT,)
D 1 /)
Respondent)
RIVERVIEW ENERGY CORPORATION,)
RIVERVIEW ENERGY CORE ORGITION,	,)
Respondent/Permittee)

PETITION FOR ADMINISTRATIVE REVIEW

The Indiana Department of Environmental Management unlawfully has issued a permit to a new and massive refinery that would be the first of its kind in the United States and would emit tons of dangerous air pollution in Spencer County, Indiana. Southwestern Indiana Citizens for Quality of Life, Inc. and Valley Watch, Inc. (Petitioners), on behalf of their members who are aggrieved and adversely affected by potential air pollution from Riverview Energy Corporation's proposed direct coal hydrogenation refinery (Refinery) in Dale, Spencer County, Indiana, by counsel, hereby submit this Petition for Administrative Review of Indiana Department of Environmental Management's (IDEM's) decision to

Operating Permit No. T147-39554-00065 (the Permit) for the Refinery on June 11, 2019. A copy of the Permit, which includes the Commissioner's Notice of Decision, is attached as Exhibit A.

Petitioners are represented by Kathryn A. Watson, Attorney No. 1939-40, of Cantrell, Strenski & Mehringer, LLP.

This petition is filed pursuant to Indiana Code (I.C.) §§ 4-21.5-3-5, -7 and 13-15-6 *et seq.*, and Indiana Administrative Code (I.A.C.) Title 315 *et seq.*

Interest of the Parties

- 1. Petitioner Southwestern Indiana Citizens for Quality of Life, Inc. (Southwestern Indiana Citizens) is an organization of members living in and around Dale, Indiana. The organization's mission is to promote engagement with local and state governments on environmental permitting decisions and to ensure that local industry preserves residents' health and safety and the beauty and charm of the region.
- 2. Petitioner Valley Watch, Inc. is an Indiana not-for-profit corporation, created in 1981 to protect the public health and environment of the lower Ohio Valley. Since that time, Valley Watch has fought to keep high-polluting industry from locating in the region and worked with government and the private sector to improve existing industry.
- 3. Petitioners have members who live, work, recreate, and breathe in Spencer County and would be aggrieved and adversely affected by emissions from the Refinery that the Permit authorizes.
- 4. For example, Mary Victoria Hess, who has lived in Dale, Indiana for 42 years, would suffer from the Refinery's air pollution because it would have a negative

effect on her ability to live in Dale cancer-free. Hess Aff ¶ 1, 4, Ex. B. Ms. Hess has had Transitional Cell Carcinoma bladder cancer and five bladder surgeries since 2001, and emissions from the Refinery could put her health at risk. *Id.* ¶ 4. Ms. Hess, who is the president of Southwestern Indiana Citizens and a member of Valley Watch, lives one mile from the proposed Refinery site. *Id.* ¶ 1-2.

- Erin Elizabeth Marchand, who lives one-and-a-half miles from the proposed Refinery site, is a member of Southwestern Indiana Citizens, a mother of three children, and a physician practicing family medicine in Santa Claus, Indiana, five miles from the proposed Refinery site. Marchand Aff ¶ 2, 4-6, Ex. C. Dr. Marchand and her family spend a lot of time outdoors near their home in Dale, where they fish in ponds in their backyard, go for walks and runs in their neighborhood, and play in nearby parks, among other activities. *Id.* ¶ 8-9. Dr. Marchand and her family will not be able to enjoy these outdoor activities to the same extent if the Refinery is built because the Refinery will emit pollutants like benzene, which is a known carcinogen that has been shown to produce negative health effects, especially in children. *Id.* ¶ 10.
- 6. Jeffrey A. Philipps, a member of Southwestern Indiana Citizens, lives one mile from the proposed Refinery site and has two children who attend the David Turnham elementary school, also one mile from the proposed Refinery site. Philipps Aff \P 1, Ex. D. Mr. Philipps has a garden on his property where he grows fresh vegetables, but pollution from the Refinery would impede his ability to continue growing and consuming vegetables from his land. *Id.* \P 2. Pollution from the Refinery also would make it more difficult for him to provide a clean and safe living environment for his two children. *Id.* \P 7.

- 7. Jerome P. Steckler, a member of Southwestern Indiana Citizens, lives on and operates a USDA-certified organic dairy farm within one mile of the proposed Refinery site. Steckler Aff ¶ 1-3, Ex. E. Mr. Steckler raises cattle, sheep, chickens, and pigs on his farm and processes USDA-certified organic artisan cheeses from milk supplied by his dairy herd. *Id.* ¶ 4. Mr. Steckler's ruminant livestock are 100% grass-fed and dependent upon the health of his farmland's soil, which he has dedicated 24 years to cultivating. *Id.* ¶ 5-6. Pollution from the Refinery would disturb the delicate composition of his soil, impact the health of his livestock, and negatively affect his ability to earn a living through his organic farm. *Id.* ¶ 7-12.
- 8. John Blair, President of Valley Watch, and other members of Southwestern Indiana Citizens—Rock Emmert, Jane A. Schipp, and Nancy and William Schroer—also will be aggrieved and adversely affected by emissions from the Refinery that the Permit authorizes. *See* Blair Aff, Ex. F; Emmert Aff, Ex. G; Schipp Aff, Ex. H; N. Schroer Aff, Ex. I; W. Schroer Aff, Ex. J.
- 9. Respondent IDEM is an agency of the State of Indiana and is charged with protecting and improving Indiana's air quality. IDEM makes decisions regarding the issuance of Prevention of Significant Deterioration, New Source Construction, and Part 70 permits, including the permit at issue in this appeal.
- 10. Respondent Riverview seeks to construct, own, and operate the proposed Refinery at 4704 E 2000 N, Dale, Spencer County, Indiana.

Jurisdiction and Standard of Review

11. The Office of Environmental Adjudication (the OEA) has jurisdiction to decide this appeal pursuant to I.C. § 4-21.5-7-3 and is authorized to assign this matter for

hearing pursuant to I.C. § 13-15-6-3 and to revoke or modify the Permit pursuant to I.C. § 13-15-7-1. The OEA's review of the Permit is *de novo* and the OEA does not give deference to IDEM's initial determination. I.C. § 4-21.5-3-14(d); *Jennings Water, Inc. v. Office of Envtl. Adjudication*, 909 N.E.2d 1020, 1025 (Ind. Ct. App. 2009) (The OEA "serves as the trier of fact in an administrative hearing and a *de novo* review at that level is necessary.").

Factual and Procedural Background

- 12. On October 24, 2018, IDEM published a draft version of the Permit (Draft Permit) for the Refinery. IDEM accepted public comments on the Draft Permit until December 10, 2018. Petitioners timely submitted comments on the Draft Permit on December 10, 2018, as did U.S. EPA Region 5.
- 13. On June 11, 2019, IDEM issued a final combined Prevention of Significant Deterioration/New Source Construction and Part 70 Operating Permit, No. T147-39554-00065, which authorizes Riverview to construct and operate a direct coal hydrogenation refinery to convert coal to liquid fuels like diesel and naphtha product.
- 14. If constructed, the Refinery would be a massive industrial complex in Spencer County, Indiana, and would use VEBA Combi Cracking technology, which is not used by any other facility in the United States.
- 15. The Permit authorizes the Refinery to emit tons of greenhouse gases, hazardous air pollutants, volatile organic compounds, and other toxic chemicals near an elementary school and in a county that already ranks among the worst one percent of U.S. counties in terms of toxic releases.¹

 $^{^1 \}it See \ EPA, Toxic \ Release \ Inventory, TRI \ Explorer, Geography \ US \ County \ Report, \it available \ at \ https://iaspub.epa.gov/triexplorer/release_geography?p_view=UCGO\&trilib=TRIQ1\&sort=RE_TOLBY\&s$

- 16. Spencer County, Indiana is considered in attainment or otherwise unclassifiable and therefore is subject to the Clean Air Act's Prevention of Significant Deterioration program. 40 C.F.R. § 81.315 (Spencer County attainment status).
- 17. For the reasons specified herein, the Permit is unlawful because it does not comply with the applicable requirements of the federal Clean Air Act, U.S. EPA regulations, and Indiana statutes and rules implementing the Clean Air Act.
- 18. Petitioners are aggrieved and adversely affected by the unlawful permit, and respectfully seek a hearing before the OEA and a decision to vacate or remand the Permit.
- 19. This Petition sets forth the specific environmental concerns and technical deficiencies of the Permit in accordance with 315 I.A.C. 1-3-2(b)(4)(A). As explained below, the Permit is unlawful in its entirety and based upon insufficient design specifications and flawed and deficient emissions and air quality impact modeling. Absent adequate specifications and modeling, Petitioners are unable to specify the Permit terms and conditions that would be appropriate to comply with the law, and the Permit should be declared void and remanded to IDEM for appropriate analyses.

Legal Background

20. The federal Clean Air Act and Indiana statutes and rules require all new, major sources of air pollution in Indiana to apply for a new source construction and "Title V" operating permit. 42 U.S.C. §§ 7475(a) (requiring permit for new source construction), 7661a(a) (requiring Title V operating permit); 326 I.A.C. 2-5.1-3 (requiring permit for new source construction); 326 I.A.C. 2-7-2(a) (requiring operating permit). In Indiana, Title V

ort_fmt=2&state=All+states&county=All+counties&chemical=_ALL_&industry=ALL&year=2017&tab_r pt=1&fld=RELLBY&fld=TSFDSP (last visited July 5, 2019) (listing Spencer County, IN as the 30th worst U.S. county in terms of toxic releases out of over 3,000 U.S. counties).

operating permits are called "Part 70" permits. 326 I.A.C. 2-7-1(23), (27)-(28).

- 21. Construction and operating permits must ensure that new sources comply with all applicable requirements under the federal Clean Air Act and Indiana statutes and rules implementing the Clean Air Act. 42 U.S.C. §§ 7661c(a); 40 C.F.R. § 70.6(a)(1); 326 I.A.C. 2-7-1(6), -2(d)(1), -5(1), -8(a)(4).
- 22. Permits issued to sources in attainment or unclassifiable areas in Indiana also must comply with all applicable requirements of the federal Prevention of Significant Deterioration program. *Id.*; *see also* 42 U.S.C. § 7475(a).
- 23. IDEM only is authorized to issue permits to sources that "will not cause, or contribute to, air pollution in excess of any [] maximum allowable increase or maximum allowable concentration for any pollutant." 42 U.S.C. § 7475(a)(3); 326 I.A.C. 2-2-5(a).
- 24. For the reasons below, Permit No. T147-39554-00065 does not comply with "all applicable requirements" of the Clean Air Act and Indiana statutes and rules implementing the Clean Air Act and therefore is invalid and unlawful. The Permit also is invalid and unlawful because it was issued in violation of public participation requirements.

COUNT I

THE PERMIT IS UNLAWFUL BECAUSE ITS ISSUANCE VIOLATED PUBLIC PARTICIPATION REQUIREMENTS.

- 25. Petitioners reallege and incorporate by reference the foregoing paragraphs.
- 26. Indiana rules require IDEM to provide the public with "information sufficient to notify the public as to the emissions implications" of an air permit prior to issuing that permit. 326 I.A.C. 2-7-17(c)(1)(C)(iv).
- 27. Indiana's Access to Public Records Act, I.C. § 5-14-3 *et. seq.*, also authorizes the public to request and obtain public records from agencies like IDEM. IDEM

must provide the requested records "within a reasonable time." *Id.* § 5-14-3-3(b).

- 28. On June 19, 2018, Petitioners requested that IDEM provide access to certain public records that were necessary to the public's notice and understanding of the proposed Refinery's emissions implications. On June 25, 2018, Petitioners reiterated IDEM's obligation to complete the June 19, 2018 records request.
- 29. On November 15, 2018, IDEM requested additional information regarding Petitioners' June 19, 2018 records request. Petitioners provided the requested information on November 21, 2018.
- 30. On February 1, 2019, after IDEM failed to acknowledge Petitioners' November 21 letter or respond to Petitioners' June 19 records request, Petitioners filed a formal complaint with Indiana's Public Access Counselor seeking relief for IDEM's failure to comply with the Access to Public Records Act. On March 21, 2019, the Public Access Counselor requested additional information about Petitioners' complaint, which Petitioners provided on March 28, 2019. As of the date of this petition, the Public Access Counselor has not issued an opinion in response to Petitioners' February 1, 2019 complaint.
- 31. On June 3, 2019, nearly one year after Petitioners submitted their request and only eight days before IDEM issued a permit to the proposed Refinery, IDEM provided records in response to Petitioners' June 19, 2018 request.
- 32. IDEM violated Indiana's Access to Public Records Act by failing to provide the requested records to Petitioners "within a reasonable time." IDEM's failure to timely provide Petitioners and the public with the requested public records also precluded them from having sufficient information to understand the "emissions implications" of the proposed Refinery in time to prepare their comments sufficiently during the public

comment period or before IDEM's issuance of the Permit in violation of 326 I.A.C. 2-7-17(c)(1)(C)(iv).

33. Because of IDEM's failure to respond to Petitioners' records request within a reasonable time and to provide the public with sufficient information about the Refinery's emissions implications prior to the close of the public comment period and issuance of the Permit, Petitioners respectfully request vacatur and remand of the Permit so that IDEM can reopen the public comment period and Petitioners can submit comments based on the requisite information regarding the Refinery's emissions implications. IDEM's failure to do so would be a violation of 326 I.A.C. 2-7-17(c)(1)(C)(iv). The Permit also should be vacated and remanded for the additional reasons set forth in the following counts.

COUNT II

THE PERMIT IS INVALID BECAUSE IDEM HAS NO BASIS TO DETERMINE THE REFINERY'S AIR POLLUTION IMPACTS.

- 34. Petitioners reallege and incorporate by reference the foregoing paragraphs.
- 35. Indiana law requires IDEM to support its permitting decisions with "substantial evidence" and prohibits IDEM from issuing an air permit until it has "approved the plans and specifications" for the proposed new source and "determined that the facility, equipment, or device meets the requirement[s]" of the Clean Air Act and Indiana law. I.C. §§ 4-21.5-5-14(d)(5), 13-15-3-5.
- 36. The Clean Air Act further requires IDEM to conduct a careful and independent evaluation of the consequences of a permitting decision before issuing a permit to a new source of air pollution in Indiana. 42 U.S.C. § 7470(5).²

² See also EPA, New Source Review Workshop Manual, at B.53-54 (Draft Oct. 1990) (stating that the permit agency must act independently and not defer to the permittee) ("NSR Workshop Manual").

- 37. Part 70 permits, like the one issued to the Refinery, must include compliance certification, testing, monitoring, reporting, and recordkeeping requirements that ensure the source will comply with the conditions of its permit. 42 U.S.C. § 7661c(c); 40 C.F.R. § 70.6(c)(1). Part 70 permits also must include such conditions as necessary to assure compliance with all applicable requirements of the Clean Air Act and Indiana statutes and rules implementing the Clean Air Act. 42 U.S.C. § 7661c(a); 40 C.F.R. § 70.6(a)(1). "Applicable requirements" include all standards, emissions limits, and requirements of the Clean Air Act. 40 C.F.R. § 70.2.
- An application for a Part 70 permit must include information to the "extent necessary to determine applicable requirements, including . . . compliance with applicable requirements . . . and compliance during the term of the permit." 326 I.A.C. 2-7-4(c). Specifically, a Part 70 permit application must provide: "information related to the emissions of air pollutants as is sufficient to verify which requirements are applicable to the source;" "identification and a description of all points of emissions . . . in sufficient detail to establish the . . . applicability of requirements of the [Clean Air Act];" "emissions rates of all pollutants . . . in such terms as are necessary to establish compliance consistent with the applicable standard reference test method;" "[1]imitations on source operation affecting emissions;" and "[0]ther specific information that may be necessary to (A) implement and enforce other applicable requirements of the [Clean Air Act] or . . . (B) determine the applicability of the requirements," among other information. *Id.* (emphasis added).
- 39. In addition, applications for new source construction permits must include the "design capacity and typical operating schedule of the proposed construction" and a

"description of any emission control equipment, including design specifications," among other information. *Id.* 2-5.1-3(c)(2).

- 40. IDEM has issued the Permit to the Refinery in violation of these provisions of the Clean Air Act and Indiana statutes and rules implementing the Act. The Refinery's Permit is based on an insufficient application that violates 326 I.A.C. 2-7-4(c) because it does not include the necessary information to "determine applicable requirements, including... compliance with applicable requirements... and compliance during the term of the permit." The Refinery's permit application also violates I.C. § 13-15-3-5 and 326 I.A.C. 2-5.1-3(c)(2) because it does not contain sufficient information about the Refinery's design capacity and specifications. For example, the permit application and related communications reveal that neither Riverview nor IDEM have finalized design specifications and process details related to the Refinery's coal size reduction processes; acid gas and natural gas burners; cooling water treatment program; hydrogen plant; and flaring scenarios, among other aspects of the Refinery's proposed operations.
- 41. By issuing a Permit that is based on an incomplete plant design and uncertain emissions levels, IDEM also has failed to support its Permit with "substantial evidence" in violation of Indiana law and has failed to conduct the requisite careful and independent evaluation of the Refinery's consequences in violation of the Clean Air Act. *See* I.C. §§ 4-21.5-5-14(d)(5); 42 U.S.C. § 7470(5).³

COUNT III

THE PERMIT UNLAWFULLY RELIES ON DEFICIENT AND ERRONEOUS EMISSIONS CALCULATIONS.

42. Petitioners reallege and incorporate by reference the foregoing paragraphs.

³ See also NSR Workshop Manual at B.53-54

- 43. When a proposed new source of air pollution will be located in an area subject to the Clean Air Act's Prevention of Significant Deterioration program, that source must "demonstrate that allowable emissions increases in conjunction with all other applicable emissions increases or reductions (including secondary emissions) will not cause or contribute to air pollution in violation of any: (1) ambient air quality standard . . . or (2) applicable maximum allowable increase over the baseline concentration" 326 I.A.C. 2-2-5(a); 42 U.S.C. § 7475(a)(3).
- 44. Permits issued to a new source of air pollution must contain emissions limitations that assure: maintenance of ambient air quality standards; maintenance of the Prevention of Significant Deterioration program's maximum allowable increases in air pollutant concentrations; protection of public health; and compliance with the Clean Air Act, Indiana statutes and rules that implement the Act, and all other "applicable requirements." 326 I.A.C. 2-5.1-3(e).
- 45. IDEM has violated these provisions of the Clean Air Act and Indiana statutes and rules by insufficiently evaluating the air quality impacts of the Refinery using deficient and incorrect emissions calculations that: describe controlled emissions of sulfur dioxide that are greater than uncontrolled emissions;⁴ use outdated global warming potentials for greenhouse gas emissions;⁵ and inappropriately rely on unreliable AP-42 emissions factors and the Refinery's incomplete design specifications.⁶
- 46. IDEM's reliance on these deficient and incorrect emissions calculations precludes IDEM from accurately modeling the Permit's air quality impacts and ensuring

⁴ *Compare* Addendum to the Technical Support Document, App. A, p 1 (uncontrolled emissions) *with id.* at 2 (controlled emissions).

⁵ *Id.* at 13, 19-20, 23, 26, 28-29, 34, 43.

⁶ See, e.g., id. at 9-10, 13-14, 16, 19-21, 24, 26, 28-29, 31, 33-36, 38-41, 45, 47, 49.

that the Refinery "will not cause or contribute to air pollution in violation of any: (1) ambient air quality standard . . . or (2) applicable maximum allowable increase over the baseline concentration"

47. Because IDEM has evaluated the air quality impacts of the Refinery using incomplete and potentially inaccurate emissions information that is insufficient to ensure the Permit will protect public health and will not worsen Spencer County's air quality, the Permit does not comply with the federal Clean Air Act or Indiana law.

COUNT IV

THE PERMIT UNLAWFULLY RELIES ON DEFICIENT AND INACCURATE AIR QUALITY MODELING.

- 48. Petitioners reallege and incorporate by reference the foregoing paragraphs.
- 49. Before issuing a permit to a proposed new source of air pollution in an area subject to the Prevention of Significant Deterioration program, IDEM must model the air quality impacts of that source according to federal guidelines. 326 I.A.C. 2-2-5(d)(1) (requiring IDEM's air quality impact analyses to comply with the requirements of 40 C.F.R. Pt. 51, App. W (EPA Guideline on Air Quality Models)).
- 50. IDEM must model all emissions at the levels that the permit would authorize. *See generally* 40 C.F.R. Pt. 51, App. W. IDEM also must model the air quality impacts of a proposed new source using meteorological data and data on background concentrations of air pollution that is "representative" of the proposed site before issuing a permit to that source. *Id.* at 8.3.1(b), 8.4.1(b).
- 51. IDEM did not model the air quality impacts of the Refinery using meteorological or background concentration data that is representative of the proposed

Refinery site. According to the Permit's Technical Support Document,⁷ IDEM modeled the Refinery's air quality impacts using meteorological data from the Evansville Airport, which has different micrometeorological conditions, terrain, and wind-flow patterns, from the proposed Refinery site. In addition, IDEM's data on background pollutant concentrations and upper air quality came from monitors that were located hundreds of miles away from the proposed Refinery site in South Bend, Indiana and Lincoln, Illinois. IDEM has not shown that data from these monitors are "representative" of the proposed Refinery site.

- 52. IDEM also modeled the Refinery's air quality impacts, including the amount by which the Refinery would exceed major source emissions thresholds, contribute to air pollution in excess of any maximum allowable increase for any pollutant, and maintain National Ambient Air Quality Standards, using inaccurate emissions data based on unreliable AP-42 emissions factors and on underestimates of sulfur dioxide emissions from flaring, particulate matter emissions from traffic, and sulfur dioxide and nitrogen oxide emissions from start-up, shutdown, and malfunction events. *Id.* The Permit's modeling also fails to account for the emission of certain pollutants from several sources located near the proposed Refinery site that contribute to the maximum allowable increase in those pollutants for the area. *Id.*
- 53. Because IDEM did not model the air quality impacts of the Refinery's Permit using emissions data that is accurate and representative of the proposed Refinery, IDEM's issuance of the Permit violates 326 I.A.C. 2-2-5(d)(1) and 40 C.F.R. Pt. 51, App. W.

 $^{^{7}\}mbox{\it See generally}$ Addendum to the Technical Support Document – App. C (Air Quality Impact Analysis).

COUNT V

THE PERMIT IS UNLAWFUL BECAUSE IT DOES NOT REQUIRE THE BEST AVAILABLE CONTROL TECHNOLOGY FOR CERTAIN POLLUTANTS.

- 54. Petitioners reallege and incorporate by reference the foregoing paragraphs.
- 55. Major stationary sources that are located in areas subject to the Prevention of Significant Deterioration program must apply the "Best Available Control Technology" for all regulated pollutants that the source has the potential to emit in "significant amounts." 42 U.S.C. § 7475(a)(4); 326 I.A.C. 2-2-3(2).
- 56. Regulated pollutants are those "for which a national ambient air quality standard has been promulgated" or that are "subject to regulation" under the Clean Air Act. 326 I.A.C. 2-2-1(ss).
- 57. The amount of emissions that is considered "significant" is determined by regulation on a pollutant-by-pollutant basis. *Id.* 2-2-1(ww)(1)(B).
- 58. The Best Available Control Technology is "an emission limitation . . . based on the maximum degree of reduction of each regulated [] pollutant that would be emitted from any proposed major stationary source . . . that [IDEM], on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for the source" *Id.* 2-2-1(i); 42 U.S.C. § 7479(3). "Congress intended [the Best Available Control Technology standard] to perform a technology-forcing function."
- 59. Permitting authorities like IDEM must select the most stringent available control technology as the Best Available Control Technology "unless the applicant

⁸ EPA, Transmittal of Background Statement on "Top-Down" Best Available Control Technology (BACT) (June 13, 1989), 5 ("EPA Background Statement on BACT"), available at https://www.epa.gov/sites/production/files/2015-07/documents/topdawn.pdf (last visited July 8, 2019).

demonstrates, and the permitting authority in its informed judgment agrees, that technical considerations, or energy, environmental or economic impacts justify a conclusion that the most stringent technology is not 'achievable.'" If a permitting authority does not select the most stringent technology, the authority must develop a sufficient record to support the reasonableness of its determination that such technology is not the Best Available Control Technology. *Alaska Dep't of Envtl. Conservation v. EPA*, 540 U.S. 461, 487-88, 495 (2004) (affirming EPA's reversal of a state permitting decision and deferring to EPA's interpretation that the Clean Air Act requires state permitting authorities to provide a reasoned justification, supported on the record, for their technological determinations).

- 60. The proposed Refinery would qualify as a major stationary source within an attainment or unclassifiable area that is subject to the Prevention of Significant Deterioration program and therefore must apply the Best Available Control Technology.
- 61. In compliance with the Best Available Control Technology standard, IDEM cannot issue a permit to the Refinery unless the permit requires the most stringent available control technology for all regulated pollutants that the Refinery has the potential to emit in significant amounts, or IDEM provides a reasoned justification supported on the record for its decision to require less-stringent alternative technologies.
- 62. IDEM has issued a permit for the Refinery that is based on an inadequate and incomplete evaluation of achievable control technologies because IDEM's Best Available Control Technology analysis considers only what control technologies have been

⁹ NSR Workshop Manual at B.2; *see also id.* at B.53-54 ("[T]he BACT selection essentially should default to the highest level of control for which the applicant could not adequately justify its elimination based on energy, environmental and economic impacts. If the applicant is unable to provide to the permit agency's satisfaction an adequate demonstration for one or more control alternatives, the permit agency should proceed to establish BACT and prepare a draft permit based on the most effective control option for which an adequate justification for rejection was not provided.").

achieved in the past.¹⁰ This approach violates the plain language of the Clean Air Act, 42 U.S.C. § 7479(3), and Indiana law, 326 I.A.C. 2-2-1(i), which require IDEM to determine what control technologies are "achievable" for the Refinery, even if they have not been previously applied.¹¹

63. Further, the Permit does not require the Refinery to adopt the most stringent available technologies for the Refinery's flaring emissions or fugitive emissions of volatile organic compounds from leaking components, which are "regulated pollutants" that the Refinery has the potential to emit in significant amounts. Specifically, IDEM's permit selects the standard "Leak Detection and Repair Program" as the Best Available Control Technology for fugitive volatile organic compounds from leaking components and fails to consider the more stringent available control technologies, enhanced Leak Detection and Repair and Optical Gas Imaging. IDEM's permit also rejects flare gas recovery as the Best Available Control Technology for flaring emissions and selects less stringent alternative controls instead. IDEM has not provided a reasoned explanation for its selection of less-stringent control technologies for the Refinery's flaring or volatile organic compound emissions.

¹⁰ See, e.g., Addendum to the Technical Support Document, App. B (BACT Analysis) pp. 61 (stating that "[i]n the absence of demonstrated success, post-combustion controls for CO such as RTO's, catalytic oxidation, and flares are considered technically infeasible"); 69 (relying solely on EPA's RACT/BACT/LAER Clearinghouse of air permits to determine that "use of good combustion practices is the only control for PM/PM₁₀/PM_{2.5} for Claus TGTU incinerators").

¹¹ See NSR Workshop Manual at B.4 III.A ("The control alternatives should include not only existing controls for the source category in question, but also . . . innovative control technologies."); see also id. (noting that regulators should consider all air pollution control technologies with "a practical potential for application to the emissions unit and the regulated pollutant under evaluation"); EPA Background Statement on BACT at 5 ("Congress intended BACT to perform a technology-forcing function.").

¹² Permit No. T147-39554-00065 (Permit), D.12.1, p. 138; *see also* Addendum to the Technical Support Document, App. B at 143-44 (omitting enhanced Leak Detection and Repair and Optical Gas Imaging).

¹³ See Permit, D.5.1, pp. 93-95; see also Addendum to the Technical Support Document, App. B at 83-98.

- 64. Furthermore, in rejecting flare gas recovery technology, IDEM assumes that the Refinery's flares would have a 98% destruction efficiency that would leave little to no flare gas for capture and reutilization.¹⁴ This assumption is not supported by any enforceable permit limits or by any evidence from other refineries that flares operate with such high destruction efficiencies.
- 65. Because the Permit does not comply with the Best Available Control Technology requirements, the Permit is unlawful under both the federal Clean Air Act and the Indiana statutes and rules implementing the Act.

COUNT VI

THE PERMIT IS UNLAWFUL BECAUSE IT DOES NOT ADDRESS FLARING EMISSIONS ADEQUATELY.

- 66. Petitioners hereby reallege and incorporate by reference the foregoing.
- 67. Permits must not "cause or contribute to air pollution in violation of any: (1) ambient air quality standard . . . or (2) applicable maximum allowable increase over the baseline concentration" 326 I.A.C. 2-2-5(a); 42 U.S.C. § 7475(a)(3). Part 70 permits must include compliance certification, testing, monitoring, reporting, and recordkeeping requirements that ensure the source will not violate any air quality standard or pollutant concentration limit. 42 U.S.C. § 7661c(c); 40 C.F.R. § 70.6(c)(1).
- 68. Permits also must comply with federal New Source Performance Standards. 40 C.F.R §§ 60.100 *et. seq.* (New Source Performance Standards for Petroleum Refineries), 60.7(b)-(c) (reporting requirements for new sources); 326 I.A.C. 12-1-1 (requiring compliance with federal New Source Performance Standards).
 - 69. Petroleum refineries constructed after May 14, 2007 must comply with

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¹⁴ See Permit, D.5.1(e)(2), p. 95.

federal New Source Performance Standards and continuous emissions monitoring requirements, which require sources to "report excess emissions [including from flares] no less frequently than quarterly" unless a "permit specifies or a rule requires more frequent reports." 326 I.A.C. 3-5-7(b).

- 70. Federal regulations authorize IDEM to determine on a case-by-case basis whether "more frequent reporting is necessary to accurately assess the compliance status" of a source's flares. 40 C.F.R § 60.7(c).
- 71. The proposed Refinery is a petroleum refinery that is subject to Federal New Source Performance Standards.
- 72. The proposed Refinery would have three flares servicing overpressure and emergency relief from the Refinery's VEBA Combi Cracking and Sulfur Recovery units. The Permit sets emissions levels for these flares that would limit flaring events to between one and six times per year for a limited number of hours and at a limited flow rate. ¹⁵
- 73. The Permit's emissions limits for flaring events are based on the Refinery's incomplete design specifications and on IDEM's inaccurate air quality modeling as described above in Counts II and IV, including insufficient information regarding the Refinery's flaring scenarios and insufficient or missing emissions data for start-up, shutdown, and malfunction events at the Refinery.
- 74. The Permit also does not require the Refinery to report emissions exceedances from its flares more frequently than quarterly.¹⁶
 - 75. Because the Permit is based on incomplete and inaccurate data regarding

¹⁵ See Permit D.5.1, p. 93-95 (Emissions Limitations and Standards for Flares); see also Addendum to the Technical Support Document, App. A at 27.

¹⁶ Permit, D.5.10, p. 98.

the Refinery's flaring emissions, IDEM must require the Refinery to report excess flaring

emissions more frequently than quarterly.

76. By failing to require more frequent reporting, IDEM has issued a permit

that is insufficient to ensure that the Refinery "will not cause or contribute to air pollution

in violation of any: (1) ambient air quality standard . . . or (2) applicable maximum

allowable increase over the baseline concentration " 326 I.A.C. 2-2-5(a); 42 U.S.C. §

7475(a)(3). The Permit therefore does not comply with the Clean Air Act and Indiana

statutes and rules implementing the Act.

Conclusion and Reservation of Rights

77. Petitioners reserve the right to appeal any new or revised permits issued on

remand.

78. Petitioners reserve the right to request a stay of the Permit during the

pendency of this appeal in the event Riverview commences or undertakes actions to begin

construction of the Refinery.

WHEREFORE, Petitioners request that the Court grant the following relief:

1. Vacate IDEM's decision to issue Permit No. T147-39554-00065;

2. Declare Permit No. T147-39554-00065 invalid;

3. Order all additional relief as the OEA deems appropriate and allowed by

law.

Dated: July 9, 2019

Respectfully submitted,

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CERTIFICATE OF SERVICE

I certify that on the 9th day of July 2019, service of a true and complete copy of the foregoing "Petition for Administrative Review" was made upon each of the following individuals by private carrier, postage prepaid:

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